

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Durga Patil

GENERAL INFORMATION:

Name:	Owensboro Grain Biodiesel L.L.C.
Address:	1145 Ewing Road, Owensboro, KY 42302
Date application received:	February 28, 2008
SIC/Source description:	2899, Chemical preparation
Source ID:	21-059-00211
Agency Interest:	77459
Activity:	APE20080001
Permit:	F-06-010 R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
X Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:**Emissions Potential of Existing Equipment (F-06-010)**

POLLUTANT	ACTUAL (TPY)	POTENTIAL (TPY)
VOC	< 90	13.94
Single HAP (CAS #)		
Hexane (10-54-3)	< 9	5.4
Methanol(67-56-1)	< 9	< 9
Source wide HAPs	< 22.5	16.94

SOURCE DESCRIPTION:

Owensboro Grain Biodiesel, L.L.C. produces biodiesel from refined vegetable oil, methanol and sodium methoxide. Other materials used in the process are caustic soda (being stored at the adjacent refinery and then pumped as needed to unit process); hydrochloric acid and citric acid. The source consists of a biodiesel production unit having a maximum production rate of 42,000 pounds of biodiesel per hour, 5,100 pounds of crude glycerine per hour and 550 pounds of fatty acids per hour.

The uncontrolled emissions of any single HAP is equal to or greater than ten (10) tons per year (tpy) and the combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has requested voluntary permit emission limits of 9 tons per year or less of a single hazardous air pollutant (HAP), and 22.5 tpy or less of the combined HAPs

MINOR PERMIT REVISION 1:**Addition of HCl storage and handling capability and Citric Acid storage and handling capability**

The source is adding storage and handling capability for hydrochloric acid and citric acid. Two small tanks for the storage of hydrochloric acid and citric acid will be installed at the plant. Both are listed as insignificant activities and covered in the list of insignificant activities approved by the Division.

During the processing of this application, the Division determined that the facility is subject to NSPS regulations and therefore subject to 40 CFR 60 regulations. These requirements, along with the related testing, reporting, record keeping, and monitoring requirements are incorporated into the permit.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Owensboro Grain Biodiesel has requested voluntary permit emission limits of 9 tons per year (tpy) or less of a single hazardous air pollutant (HAP) and 22.5 tpy or less of combined HAPs. Compliance with these limitations shall also limit total volatile organic compound (VOC) emissions from the source to 90 tpy or less. Compliance with these permit limits shall make the requirements of 401 KAR 52:020, Title V permits, not applicable to this source. Compliance with these limits shall also make the requirements of 40 CFR Part 63 for major sources of HAP emissions, as incorporated by reference at 401 KAR 63:002, not applicable to this source. Addition of the hydrochloric acid and citric acid storage and handling is not going to affect the VOCs or the HAPs.

OPERATIONAL FLEXIBILITY:

None